

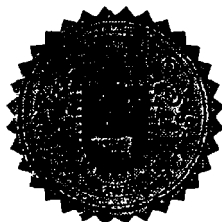
Delaware

PAGE 1

The First State

I, HARRIET SMITH WINDSOR, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE RESTATED CERTIFICATE OF "MEDTRONIC AVE, INC.", CHANGING ITS NAME FROM "MEDTRONIC AVE, INC." TO "MEDTRONIC VASCULAR, INC.", FILED IN THIS OFFICE ON THE NINTH DAY OF SEPTEMBER, A.D. 2003, AT 1:20 O'CLOCK P.M.

A FILED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS.



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030580192

Harriet Smith Windsor

Harriet Smith Windsor, Secretary of State
AUTHENTICATION: 2622839

DATE: 09-09-03

**AMENDED AND RESTATED CERTIFICATE OF INCORPORATION
OF
MEDTRONIC AVE, INC.**

Medtronic AVE, Inc., a corporation organized and existing under the General Corporation Law of the State of Delaware, hereby certifies as follows:

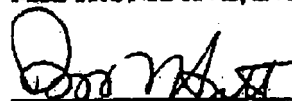
1. The name of the corporation is "Medtronic AVE, Inc." Its original Certificate of Incorporation was filed with the Secretary of State on July 30, 1991 under the name "Applied Vascular Engineering, Inc." Through subsequent filings with the Secretary of State, the name was changed to "Arterial Vascular Engineering, Inc." on January 30, 1996 and to "Medtronic AVE, Inc." on January 28, 1999, as the result of a merger on that date with MAY Merger Corp., which was incorporated in the State of Delaware on November 24, 1998.

2. The Amended and Restated Certificate of Incorporation of the corporation, in the form attached hereto as Exhibit A, has been duly adopted by the corporation's Board of Directors and sole stockholder in accordance with the provisions of Sections 141, 228, 242 and 245 of the General Corporation Law of the State of Delaware pursuant to unanimous written consent with waiver of meeting notice.

3. The Amended and Restated Certificate of Incorporation so approved reads in full as set forth in Exhibit A hereto and is hereby incorporated by reference herein.

IN WITNESS WHEREOF, Medtronic AVE, Inc. has caused this Certificate to be signed by David J. Scott, its Vice President and Secretary, this 8th day of September 2003.

MEDTRONIC AVE, INC.



David J. Scott, Vice President and Secretary

ATTEST:



Carol E. Malkinson, Assistant Secretary

Exhibit A

**AMENDED AND RESTATED CERTIFICATE OF INCORPORATION
OF
MEDTRONIC VASCULAR, INC.**

ARTICLE 1 - NAME

The name of the corporation shall be Medtronic Vascular, Inc.

ARTICLE 2 - REGISTERED OFFICE AND AGENT

The registered office of the corporation in the State of Delaware is 1209 Orange Street, in the City of Wilmington, County of New Castle, Delaware, 19801. The name of its registered agent at such address is The Corporation Trust Company.

ARTICLE 3 - PURPOSES

The nature of the business or purposes to be conducted or promoted by the corporation is to engage in any lawful acts and activities for which corporations may be organized under the General Corporation Law of Delaware.

ARTICLE 4 - STOCK

The aggregate number of shares the corporation has authority to issue shall be 2,500 shares of Common Stock, \$.01 par value. Holders of Common Stock shall be entitled to one vote for each share of Common Stock held of record.

ARTICLE 5 - RIGHTS OF STOCKHOLDERS

5.1) **No Preemptive Rights.** No holder of shares of the corporation of any class now or hereafter authorized has any preferential or preemptive right to subscribe for, purchase or receive any shares of the corporation of any class now or hereafter authorized, or any options or warrants for such shares, which may at any time be issued, sold or offered for sale by the corporation.

5.2) **No Cumulative Voting Rights.** No holder of shares of the corporation of any class now or hereafter authorized shall be entitled to cumulative voting.

ARTICLE 6 - MEETINGS AND BOOKS

6.1) Meetings of Stockholders and Election of Directors. Meetings of stockholders may be held within or outside the State of Delaware, as the Bylaws may provide. Elections of directors need not be by written ballot unless and except to the extent that the Bylaws so provide.

6.2) Corporate Books. The books of the corporation may be kept within or (subject to any provision contained in the statutes) outside the State of Delaware at such place or places as may be designated from time to time by the Board of Directors or in the Bylaws of the corporation.

ARTICLE 7 - LIMITATION OF DIRECTOR LIABILITY

To the fullest extent permitted by the Delaware General Corporation Law, as the same exists or may hereafter be amended, a director of the corporation shall not be liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director. If the Delaware General Corporation Law is amended after the date of the filing of this Amended and Restated Certificate of Incorporation to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the corporation shall be eliminated or limited to the fullest extent permitted by the Delaware General Corporation Law, as so amended from time to time. No repeal or modification of this Article 7 by the stockholders shall adversely affect any right or protection of a director of the corporation existing by virtue of this Article 7 at the time of such repeal or modification.

ARTICLE 8 - BYLAWS

The Board of Directors is expressly authorized to make and alter Bylaws of this corporation, subject to the power of the stockholders to change or repeal such Bylaws and subject to any other limitations on such authority provided by the General Corporation Law of Delaware.